

Bicyclopentadienylidene, octachloro-

Other names:	1,3-Cyclopentadiene,
Inchi:	1,2,3,4-tetrachloro-5-(2,3,4,5-tetrachloro-2,4-cyclopentadien-1-ylidene)-
InchiKey:	KWINUFZNQMMNJ-P-UHFFFAOYSA-N
Formula:	C10Cl8
SMILES:	C1C1=C(Cl)C(=C2C(Cl)=C(Cl)C(Cl)=C2Cl)C(Cl)=C1Cl
Mol. weight [g/mol]:	403.73
CAS:	6298-65-3

Physical Properties

Property code	Value	Unit	Source
gf	79.90	kJ/mol	Joback Method
hf	-39.81	kJ/mol	Joback Method
hfus	43.18	kJ/mol	Joback Method
hvap	82.15	kJ/mol	Joback Method
ie	8.47	eV	NIST Webbook
log10ws	-8.25		Crippen Method
logp	7.067		Crippen Method
mcvol	206.460	ml/mol	McGowan Method
pc	2455.60	kPa	Joback Method
tb	813.14	K	Joback Method
tc	1081.99	K	Joback Method
tf	601.10	K	Joback Method
vc	0.801	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	350.16	J/mol×K	813.14	Joback Method
cpg	370.72	J/mol×K	1037.18	Joback Method
cpg	367.15	J/mol×K	992.37	Joback Method
cpg	363.35	J/mol×K	947.56	Joback Method
cpg	359.29	J/mol×K	902.76	Joback Method
cpg	354.91	J/mol×K	857.95	Joback Method
cpg	374.12	J/mol×K	1081.99	Joback Method

dvisc	0.0002754	Paxs	813.14	Joback Method
dvisc	0.0003071	Paxs	777.80	Joback Method
dvisc	0.0003460	Paxs	742.46	Joback Method
dvisc	0.0003945	Paxs	707.12	Joback Method
dvisc	0.0004560	Paxs	671.78	Joback Method
dvisc	0.0005357	Paxs	636.44	Joback Method
dvisc	0.0006414	Paxs	601.10	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C6298653&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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